



GOVERNMENT HOUSE

QUEENSLAND

Engineers Australia Queensland Division

and

Engineering Heritage Australia

National Engineering Heritage Landmark Award

to

SOMERSET DAM

Unveiling of the Award and Speech

by

Her Excellency Ms Penelope Wensley AO

Governor of Queensland

Somerset Dam,

Tuesday 8 June, 2010

Mayor of Somerset Regional Council, Cr Graeme Lehmann;

National President, Engineers Australia, Professor Doug Hargreaves;

National President, Engineering Heritage Australia, Mr Owen Peake;

Chairman, SEQWater, Mr Phil Hennessy;

CEO, SEQWater, Mr Peter Borrows and other members of staff of SEQWater;

President, Engineers Australia, Queensland Division (EAQD) Mr Mike Brady;

EAQD Chairman, Mr Andrew Barnes;

Members of the Queensland engineering community, including Mr Geoff Cossins, who has shared with us today some of his wealth of knowledge and experience of Somerset Dam;

Members of the Somerset Family;

Relatives and friends of engineers and others associated with the design, construction, operation and maintenance of Somerset Dam

All other distinguished guests;

Ladies and gentlemen.

In the spirit of national reconciliation, I acknowledge Australia's indigenous peoples and in particular, the Jiniburra peoples who lived in this area before European settlement and whose descendants still value their association with these lands and waters, as the first owners and now the traditional custodians.

It is a great pleasure for me to participate in this ceremony to mark the recognition of Somerset Dam as a National Engineering Heritage Landmark. I was delighted to receive the invitation to do so from the Chairman of EHA- Queensland and accepted with alacrity, for several reasons. Firstly, because although not myself an engineer, engineering has been the profession of choice through four generations of men in my family, leaving me not only with considerable respect and affection for engineers but a genuine awareness and appreciation of their contribution to the development of our State. One of my forebears, Alf McCulloch, is featured in the publication "Eminent Queensland Engineers" and although, to my knowledge, Uncle Alf was not directly involved with the Somerset

Dam project, he would, I am certain, have been immensely gratified by this Award, seeing it as a worthy recognition of Queensland excellence in engineering. (as would my late brother-in-law, John Ward, former Principal Planning Engineer with the Queensland Department of Natural Resources and Chairman of the Institution of Engineers Water Panel-who, like Geoff Cossins, was passionate about ‘water engineering’).

A second reason for my acceptance of this invitation was my interest in seeing engineering projects and works acknowledged and valued as part of our Queensland heritage and history. As Governor, I am very actively involved with these issues, including as Patron of the National Trust of Queensland and various community history societies and am engaged with various other National, State and local organisations which are working energetically, not only to document and protect our heritage, but also to raise awareness of its richness and diversity. Despite the fact that nine Queensland engineering works have been recognized through the Heritage Recognition Program run by Engineering Heritage Australia, I don’t think this Program has sufficient recognition or profile in our State outside the

engineering community and I believe it needs greater promotion- something that I will certainly be making an effort to do in the future as I travel around the State, armed with all the knowledge I have acquired in preparing for today's event. Already I have instructed my Office that on my next visit to Bundaberg I wish to visit Buss Park and see for myself the first Historic Engineering Plaque ever awarded in Australia-for Sugar Cane harvesting Machines...and I intend to work my way around all nine plaque location sites, as a means of drawing attention to the historic achievements they represent, for Queensland and for Queensland engineering.

As the Bundaberg plaque was a 'first', so, too, is this Somerset Dam award-as the first time that a Queensland engineering work has received the premium award given by Engineers Australia-and earned the designation of 'Landmark'. To give you an idea of what this represents, it puts this Dam in the company of such legendary engineering achievements as the Sydney Harbour Bridge, the Snowy Mountains Hydro-electric scheme and the Woomera Rocket Range.

This is distinguished company indeed and may come as a surprise to some- actually, I suspect to **most** Queensland citizens who have grown up with the Somerset Dam as an accepted part of the landscape of South East Queensland, benefiting from its recreational features- its fishing , camping and watersports facilities- but oblivious to its history.

I know that is NOT the case for many who are with us for this ceremony today-for the engineers like Geoff Cossins-who effectively operated the dam for the Brisbane City Council from the dam's formal completion in 1959 until his retirement some 25 years later- and some six of his colleagues who worked directly on the dam and who obviously have intimate knowledge both of its history and its features and of the many challenges and intricacies of the dam's construction and operation; and the relatives of other engineers who played a role, but who are no longer with us- in particular the relatives of: **Bill Nimmo**, Designing Engineer, then Chief Engineer from 1934-1949 and later Commissioner for Irrigation and Water Supply; of **Glen Sheil**, first Resident Engineer for Construction, later to become a major force in the mining industry and of **Raleigh**

Gipps – the last Resident Engineer for Construction, who learned his craft under the tutelage of **Dr Bradfield**, who had designed the Sydney Harbour Bridge; of **Charles Mott**, Nimmo’s first Assistant Engineer for Design, who designed and supervised the construction of the village; and of two others who were extensively involved, **Evan Richard** and **Edward Shepherd**.

Present also today-and equally knowledgeable about the Dam’s history-and more particularly, the genesis of its name, are the grandson and great grandsons of Henry Somerset, **Arthur, Rollo** and **John Somerset**. It is wonderful that you, too, could be here for this “Landmark” event, which enables a wider audience than your immediate family circle to appreciate the colourful story of Henry’s heroic efforts to warn of impending flood disasters, of the way in which the Somerset family operated a flood warning system stolidly for forty years and of how Henry, as a member of the Legislative Assembly, tenaciously pursued his idea for a dual-purpose dam, sited in this location.

Geoff Cossins has told us something of this story-but not all of it-and I think it bears some elaboration, not least because the uncertainties

of weather, the vicissitudes of under or over-supply of water, of living in a country of climatic extremes and in a State particularly subject to extreme weather events, still preoccupy us- and maybe we can find inspiration for the present, from recalling the past.

Henry Somerset established “Caboonbah Station” not far from here, at the junction of the Brisbane and Stanley rivers. In 1893, as we have heard from Geoff Cossins, a freak climatic event –two cyclones within a fortnight – dropped heavy and extended rain over the Blackall Range- bringing 36 inches of rain – as it was measured then - and rapidly rising flood waters flowing down the Stanley river.

Realising the flood’s potential danger to surrounding districts, Henry Somerset dispatched a horse rider to Esk to telegraph advice to Brisbane of the danger. Two weeks later, when the river rose seriously again, and the telegraph line being down, again in an effort to warn Brisbane of the impending disaster, Henry himself rowed across the flooded Brisbane River, two horses swimming in tow, to send a rider across the d'Aguilar Range to Caboolture to telegraph Brisbane. (While the message somehow did not get through, either

being misinterpreted or ignored, it was these efforts which inspired the establishment of ‘Caboonbah’ as Queensland’s first flood warning station, manned by the Somersets – unpaid - for the 40 years between 1893 and 1933.)

Henry Somerset - also a member of The Legislative Assembly, as Member for Stanley, from 1904 to 1920 - was clearly a man of action and vision. Following the devastation of the 1893 floods in the Brisbane River Valley, and then the severe drought between 1899 and 1902, highlighting the need for water storage to meet Brisbane’s growing water consumption, as Mr Cossins reminded us, it was Somerset who came up with the idea of a dam across the Stanley River which would serve two purposes- flood mitigation and water storage.

For various reasons it was not until 1935 in the midst of the great depression that the dam was commenced, in part as a major employment-generating project. But in 1943 the workforce was diverted to the war effort, halting construction until 1948 and delaying the completion of the dam’s main structure until 1953 and

its final completion to 1958, as Australia's first dam designed specifically to provide a combination of storage for urban water supply and flood mitigation for the country's largest flood-prone population.

Soon after completion of concreting, the dam almost totally mitigated damage by the 1955 flood to Brisbane and Ipswich. Its worth was again demonstrated in 1974-perhaps never better so-when Brisbane suffered one of its worst-ever floods, after 1.3 meters of rain (60 inches) fell in the southeast region. It is worth remembering that in this flood 16 people died, 8,000 people were made homeless and 1,600 homes were largely submerged, with a total of 13,000 buildings being affected. The total estimated cost was close to \$980 million and **that** is in 1974 values.

But what is not commonly known is that, had it not been for the Somerset Dam, that catastrophic cost to Brisbane would have been doubled. What a vindication of the decision to build this dam-and a tribute to all those who contributed to the design, construction and operation since completion of this innovative engineering work. We

have heard a little of its history, but not sufficiently of these innovations. From my reading of the Nomination Document to the decision-makers operating the Engineering Heritage recognition program...it involved:

one possible World First in engineering-for locating high pressure sluices below spillway sector gates;

SIX Australian 'firsts' in engineering;

and 6 other major features justifying a claim for heritage listing-a truly impressive list-and one which obviously convinced the panel...or we wouldn't be conducting this ceremony today.

Today, dams are once again in the public eye. We have just experienced one of the longest periods of low rainfall on record and, more recently, periods of exceptionally heavy rainfall. We are also being confronted with the prospect that climate change may be changing fundamentally our weather patterns and water supply in Southeast Queensland. And our population is again booming-with some 1800 new settlers a week choosing to make their home in our

State, the majority in South East Queensland. The history of Somerset Dam, the weather events which were the genesis of its making, together with the need to assure water supply to a growing population, therefore have real parallels to our situation today and relevance for the understanding of our water environment and the management of our water resources.

So the timing of this award could not be more apt or appropriate. Those who planned, designed and established the Somerset Dam-and who have maintained and operated it since for the benefit of the people of Queensland- are rightly honoured today through the conferring of this Landmark status. Their legacy was-and remains-a great one, to engineering, to our State and to our country. Let us hope that their imaginative effort and achievement will stimulate and inspire others to make equally bold decisions for the benefit of future generations, in the management of our water ways and of our water resources.

It now gives me great pleasure and pride, as Governor of Queensland, to unveil this replica Interpretive Panel, alongside this replica

Heritage Marker, which proclaim the Somerset Dam of South East Queensland to be a National Engineering Heritage Landmark.